

## Assumptions to the Annual Energy Outlook 2009

**Table 10.1. Primary Assumptions for Natural Gas Pipelines from Alaska and MacKenzie Delta into Alberta, Canada**

	Alaska to Alberta	MacKenzie Delta to Alberta
Initial flow into Alberta	3.9 Bcf per day	1.1 Bcf per day
Expansion potential	22 percent	58 percent
Initial capitalization	27.6 billion (2007 dollars)	\$10.2 billion (2007 dollars)
Cost of Debt (premium over BAA bond rate)	0.0 percent	0.0 percent
Cost of equity (premium over 10 year treasury yield note)	7.5 percent	7.5 percent
Debt fraction	60 percent	60 percent
Depreciation period	20 years	20 years
Minimum wellhead price (including treatment and fuel costs)	\$1.65 (2007 dollars per Mcf)	\$3.02 (2007 dollars per Mcf)
Risk Premium	\$0.82 (2007 dollars per Mcf)	\$0.06 (2007 dollars per Mcf)
Additional cost for expansion	\$6.44 (2007 dollars per Mcf)	\$0.35 (2007 dollars per Mcf)
Construction period	4 years	4 years
Planning period	5 years	2 years
Earliest start year	2020	2014

Source: Energy Information Administration, Office of Integrated Analysis and Forecasting. Alaska pipeline cost data are based on November 2007 pipeline proposals submitted in compliance with the Alaska Gas line Inducement Act (A61A) requirements by Conoco Phillips and Trans Canada Pipelines to the State of Alaska.

National Energy Board of Canada, "Mackenzie Gas Project – Hearing Order GH-1-2004, Supplemental Information – Project Update 2007," dated May 15, 2007;

National Energy Board of Canada, "Mackenzie Gas Project – Project Cost Estimate and Schedule Update," dated March 12, 2007;  
Canada Revenue Agency, "T2 Corporation Income Tax Guide 2006," T4012(E) Rev. 07.  
Indian and Northern Affairs Canada, "Oil and Gas in Canada's North," website address [http://www.ainc-inac.gc.ca/ps/ecd/env/nor\\_e.html](http://www.ainc-inac.gc.ca/ps/ecd/env/nor_e.html).

National Energy Board of Canada, "Application for Approval of the Development Plan for Taglu Field - Project Description," submitted by Imperial Oil Resources Ltd., TDPA-P1, August 2004;

National Energy Board of Canada, "Application for Approval of the Development Plan for Niglintgak Field - Project Description," submitted by Shell Canada Ltd., NDPA-P1, August 2004; and

National Energy Board of Canada, "Application for Approval of the Development Plan for Parsons Lake Field - Project Description," submitted by ConocoPhillips Canada (North) Ltd., PLDPA-P1, August 2004.